

ITRI 613 - Assignment 1

Due Date: 22/03/2021

DBMS

A database management system (DBMS) is a software package designed to define, manipulate, retrieve and manage data in a database. A DBMS generally manipulates the data itself, the data format, field names, record structure and file structure. It also defines rules to validate and manipulate this data.

Every company, business or organization working under the belt of Information Technology requires Database Management. Therefore, it is imperative that IT students understand database management system and the value it adds to the world today.

PART 1

For the first part of the assignment, you are tasked to provide 7 DBMS Software's of your own choosing and outline their **main advantages and disadvantages, whether closed source or open source, relational or extended-relational**. Basically, outline the **main characteristics** of each DBMS Software and outline how unique it is from others.

PART 2

For second part of the assignment, you are tasked to research and provide a report of five companies of your own choosing and outline the kind of DBMS that they are utilizing on a daily basis. Also, where possible outline the historical DBMS the company used to use and when it scaled what they chose to adopt as their new DBMS

Example: The Coca-Cola Company DBMS

Coca Cola Company used to use Oracle Databases which have SQL capabilities previously but due to its SAP application, they have moved to IBM's DB2. The act led to reduction of hardware and software cost and a better storage, retrieval and security of data. Databases provide all the information from products to employees hence they play a vital part. IBM DB2 has greater compression which would reduce database size and lower licensing renewals.

Data storage Needs

The coca cola company data center is the nerve center where servers and storage devices ensure the bulk of data is secured for the companies use. With a 10 Gb Ethernet connection by Cisco, costs have dramatically reduced and so has time spent on locating vital information.